

# NATURAL HISTORY MISCELLANEA

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## A New Genus of Pselaphid Beetles from the Antilles

**Orlando Park\***

The following description of an insect, remarkable with respect to its cephalic outline, is an addition to the neotropical fauna. I am indebted to Dr. P. **J.** Darlington of the Museum of Comparative Zoology, Harvard University, for the privilege of studying this unique animal.

### *Malleocephs* new genus

Genotype : *Malleocephs darlingtoni* new species.

Euplectini having the following combination of diagnostic characters : (1) Body widest through the head, each anterolateral cephalic area in the form of a large triangular wing. (2) Eyes well developed but invisible from a dorsal view. (3) Ventral surface of head with a few aciculate setae, no capitulate pubescence present. (4) Antennae distant, eleven-segmented, club formed by the distal segment. (5) Pronotal disc evenly convex. (6) Each elytron bifoveate ; entire sutural stria; no discal stria ; flank with a subhumeral fovea. (7) Five visible tergites; first three bearing strong margins; first tergite bearing a pair of basal abdominal carinae. (8) Seven sternites in male, seventh in the form of a small rounded aedeageal plate. (9) Internal sac of aedeagus slender, distally enlarged and quadrisetose. (10) Prosternum, tarsi and maxillary palpi as in *Melba*. (11) Mesocoxae and metacoxae contiguous.

### *Malleocephs darlingtoni* new species

Figures 1-3

*Type Male.* Shining yellowish brown ; pubescence sparse, moderately long and conspicuous on elytra and abdomen ; integuments smooth and subimpunctate. Body length **1.4** mm., and greatest width 0.34 mm.

\*Cresap Biological Laboratory, Northwestern University.

Head unique (Fig. 1) , the vertex transverse and produced as an acute triangular wing at each anterolateral area, widest part of the body, its width being about one-fourth of total body length ; distal margin medianly incised and overhanging the face ; a pair of nude vertexal foveae, mutually widely separated, each in a circular impression and the latter at base of a more shallow oblique impression ; occiput medianly slightly notched ; face transversely excavated beneath the overhanging margin ; facial excavation complex, medianly produced as a flat, thin plate that is visible dorsally at the median incisure of the vertexal margin ; this flat plate flanked on each side by a high, arcuate clypeal lamella, these lamellae enclosing a rounded tubercle that lies just beneath the flat plate and just above the labrum ; labrum elongate ; mandibles well developed, external rami unarmed ; mentum small, simple ; ventral surface of head simple, convex, almost nude, the setae present not capitate but aciculate and appressed, directed anteriorly.

Maxillary palpi four-segmented, melboid ; first segment minute ; second elongate, pedunculate, slightly arcuate ; third small, as wide as distal end of second, subtriangular ; fourth large, elongate, acute oval, bearing a minute palpal cone at apex.

Antennae eleven-segmented (Fig. 2) , distant from one another, each articulating with the head far beneath the overhanging vertexal margin ; first segment very elongate ; second rounded oval ; these first two segments large but invisible dorsally ; third elongate obconical ; fourth to eighth submoniliform, small, as wide as third ; ninth slightly wider ; tenth transverse, short, about twice as wide as ninth ; eleventh large, oviform, forming the antennal club.

Eyes subcircular, well developed, of about 38 small facets, each placed on the side of the head but invisible from a strictly dorsal view as a consequence of the expanded vertex.

Pronotum almost glabrous with a strongly convex, unmodified disc ; basal third medianly broadly impressed, this impression weakly divided ; a lateral impression each side of the median impression ; true antebasal foveae not evident.

Prosternum not medianly longitudinally carinated.

Elytra with rather prominent, rounded, unarmed humeri ; each elytron bifoveate at base, each fovea nude and surrounded by a suboval impression ; sutural stria entire ; no discal stria ; flank with a shallow, nude subhumeral fovea and a shallow longitudinal sulcoid impression that arises in basal third of elytral length rather than at the subhumeral fovea.

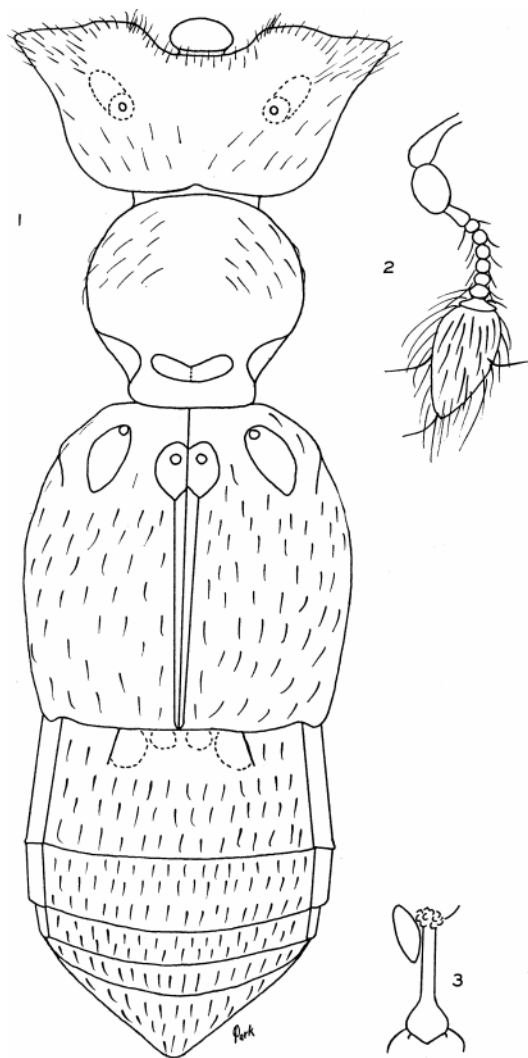


Figure 1. *Malleiceps darlingtoni* new genus and new species, dorsal aspect, x 70. 2. Left antenna, anterior aspect, x 70. 3. Internal sac of aedeagus, exserted, dorsal aspect with aedeageal plate in three-quarter view elevated asymmetrically to left, x 70.

Abdomen apically subacute. Five visible tergites ; first three with strong lateral margins ; first with a pair of straight, divergent basal abdominal carinae that are separated at base by 44 per cent of basal tergite width and occupy about 25 per cent of tergite length, four shallow impressions between these carinae ; relative tergite lengths as illustrated. Seven visible sternites, unmodified, seventh in the form of a small rounded aedeageal plate. Internal sac of aedeagus (Fig. 3) very long, flat and slender, distally expanded into a quadrisetose plate.

Legs brachysceline ; mesocoxae contiguous ; mesotrochanters each with the distal ventral edge extended as a tooth ; metacoxae contiguous ; tarsi three-segmented ; first segment minute, second elongate, third elongate but shorter than second and bearing a single long claw.

Female unknown.

Described on one male, the type, in the Museum of Comparative Zoology, Harvard University. Collected by P. J. Darlington, in whose honor the species is named, at Sanchez, Dominican Republic in July, 1938.

At first glance *Malleocephs* is apt to be associated with *Mitrametopina* of the Mitrametopina, or *Phitegnomina* of the Phitegnomina, as a consequence of its bizarre head. The new genus is out of place in these neotropical subtribes, which have thick antennae and tarsi with both a strong primary claw and a distinct accessory claw. The general affinities of *Malleocephs* are with the subtribe Trimiina. Even here it is not easily associated with other genera. Since there are no pronotal foveae in the new genus it is not closely allied to any trimiine aggregate. Its other key features would place it nearest to *Allotrimium* but this latter genus has capitulate pubescence on the ventral surface of the head, very abnormal tergites and sternites, and the front has a normal outline. On the whole, *Malleocephs* would seem to be an aberrant genus.